

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,804	603,804 06/26/2003		Do-Woo Kang	K-0532	2798
34610	7590	01/10/2006		EXAMINER	
FLESHNEI P.O. BOX 22		, LLP	LOUIS JACQUES, JACQUES H		
CHANTILLY, VA 20153				ART UNIT	PAPER NUMBER
,,				3661	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application No.	Applicant(s)					
		10/603,804	KANG ET AL.					
0	ffice Action Summary	Examiner	Art Unit					
		Jacques H. Louis-Jacques	3661					
The Period for Rep	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTE WHICHEVE - Extensions o after SIX (6) - If NO period t - Failure to rep Any reply rec	INED STATUTORY PERIOD FOR REPLER IS LONGER, FROM THE MAILING DATE in time may be available under the provisions of 37 CFR 1.7 MONTHS from the mailing date of this communication. For reply is specified above, the maximum statutory period by within the set or extended period for reply will, by statute eived by the Office later than three months after the mailing term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status								
2a)⊠ This 3)⊡ Since	onsive to communication(s) filed on <u>07 S</u> action is FINAL . 2b) This this application is in condition for allowa d in accordance with the practice under the	s action is non-final. ince except for formal matters, pro						
Disposition of	Claims							
4a) O 5) ☐ Clain 6) ☐ Clain 7) ☐ Clain	n(s) <u>1-23</u> is/are pending in the application of the above claim(s) is/are withdra n(s) <u>1,3-5 and 11-23</u> is/are allowed. n(s) <u>6-10</u> is/are rejected. n(s) <u>2</u> is/are objected to. n(s) are subject to restriction and/o	wn from consideration.						
Application Pa	pers		•					
10) The d Applic	pecification is objected to by the Examine rawing(s) filed on is/are: a) account may not request that any objection to the cement drawing sheet(s) including the correctath or declaration is objected to by the Example.	cepted or b) objected to by the E drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).					
Priority under	35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
	ferences Cited (PTO-892)	4) Interview Summary						
3) 🔲 Information	aftsperson's Patent Drawing Review (PTO-948) Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	atent Application (PTO-152)					

Art Unit: 3661

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claim 1, 3-5, 11-23 are rejected under 35 U.S.C. 102(e) as being anticipated by King et al [6,429,808].

King et al discloses a method and apparatus for assisted GPS integrity maintenance. According to King et al, a cellular network protocol which maintaining the reliability of assisted GPS based positioning is taught (abstract). The apparatus, according to King et al, relates mobile stations. See abstract. Accordingly, King et al discloses an apparatus for testing a performance of mobile station, such a cellular phone or PDA (104) having a global position system (GPS) function. See for example, column 1, lines 56-58, where it is described that the mobile station is equipped with a receiver suitable for use with a global satellite navigation system such as the Global positioning system (GPS). The mobile device includes a GPS receiver. Thus, the mobile station has global positioning system (GPS) function. The apparatus also includes a test block or integrity monitoring circuit (figure 13) including test commands and a user interface for testing the performance or integrity of the mobile station and of the GPS function. See columns 5 and 10. In particular, as shown in figure 10 and described in column 12, lines 48-63.

Art Unit: 3661

According to King et al, installing separate GPS receivers for the purpose of GPS integrity monitoring in mobile stations (terminal) can be very expensive and time consuming. Therefore, the tests block and the test interface are included in the mobile station (terminal). According also to King et al, there is provided a conversion block (circuit) for converting a GPS radio frequency (RF) signal and a Code Division Multiple Access (CDMA) RF signal to baseband signals. See column 5, lines 50-55; column 11, lines 18-32. According further to King et al, the baseband signals so derived are used to generate status information. See column 11, lines 18-50. The test interface, according to King et al, can be operated in different modes. See column 2, line 61 to column 3, line 14. The test modes, according to King et al as described in column 3, lines 1-14, can a sensitivity mode, a Doppler mode, a time calibration or a setting mode. See also column 5, lines 1-9. As explained in column 6, the test user interface is included in a test mode menu list which a usual user does not have access [to]. Columns 7 and 8, for example, describe providing a diagnostic monitoring (external) device if the mobile station is located in a shield box. References are also made to columns 11-14. The mobile station, according to King et al, comprises a memory (storage device) for loading software or program for the test block. See column 10, lines 27-49.

Page 3

Allowable Subject Matter

3. Claims 6-10 are allowed.

4. Claims 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art do not particular teach, in combination, a GPS search block for generates status information of the mobile station by using the baseband signals, an acquisition assistance (AA) data message, and a sensitivity assistance (SA) data message from the test block, wherein the GPS search block generating the acquisition assistance data message and the sensitivity assistance data message with a first test command and generating a second tests command for controlling the GPS block by using the status information. Emphasis added

Response to Amendments & Arguments

5. The amendments along with the arguments filed therewith have been entered and carefully considered by the examiner.

In particular, Applicant has amended the claims to now recite that "the apparatus including a conversion block to convert a GPS radio frequency (RF) signal and a Code Division Multiple Access (CDMA) RF signal to baseband signals and a GPS search block to generate status information based on the baseband signals" (claim 1). New claims 21-23 have been noted.

It should be noted that claims 2-4 and 13 were objected to and claims 6-10 were indicated to be allowable. In amending claim 1, Applicant failed to incorporate all the limitations of the objected claim 2. Applicant merely amended claim 1 by adding the

conversion block and GPS search block. Emphasis added. Such amendment does not render claim 1 allowable over the prior art. Original claim 2 recites "a GPS search block for generates status information of the mobile station by using the baseband signals, an acquisition assistance (AA) data message, and a sensitivity assistance (SA) data message from the test block". Amended claim 1 only recites, "a GPS search block to generate status information based on the baseband signals." The status information, as recited in amended claim 1, only depends on the baseband signal. Amended claim 1 also fails to incorporate the function of the test block in generating the acquisition assistance data message and the sensitivity assistance data message with a first test command and generating a second tests command for controlling the GPS block by using the status information as recited in object claim 2.

However, Applicant argued that "none of the applied reference teach or suggest a conversion block to convert a GPS radio frequency (RF) signal and a Code Division Multiple Access (CDMA) RF signal to baseband signal and a GPS search block to generate status information based on the baseband signals. The examiner disagrees.

Applicant argued that Chang does not disclose a GPS function or a test block including test commands configure to test a performance of the GPS function. It should be noted that claim 11 was rejection as being obvious over the combination of Chang and Burch. Applicant appears to argue that Chang does not anticipate claim, i.e. teach all the claimed features. The examiner disagrees.

For the record, as applied in the previous rejection, Chang discloses an apparatus (e.g. 200) for testing a performance of a device, such as a mobile station. The apparatus,

Art Unit: 3661

according to Chang, comprises a test block or circuit (e.g., 322-326) for testing the performance of a function of the device. See figure 3A. The apparatus, as shown in figure, is a mobile (portable or handheld) terminal. See column 7, lines 20-21. As shown in the figures, for example, the test block including test commands and a test user interface. The apparatus (e.g., 200a) may be used for testing the performance of a mobile (portable) station (e.g., 200b). As shown in figures 3 and 4, for example, the test block and test user interface are included with the mobile station. See column 3. Chang discloses testing a performance of the device (qualification and connectivity). See for example column 13. In addition, in column 14, Chang discloses that that the test set [200] of the invention can be designed to test various protocols. Chang does not teach the mobile terminal having a global position system (GPS) function. Chang discloses, at least, different test modes (including signal/error mode) and a setting mode for setting values of the test modes. See column 5, lines 12-15, 20-23 and column 9, lines 5-10. As described in column 5, lines 29-31 (referring to figure 3A), within the apparatus (200), there is provided a processor for controlling the operation of the device according to program instructions (commands) stored in a memory. However, as mentioned in the rejection, Chang does not teach the mobile terminal having a global position system (GPS) function.

King et al [6,429,808] discloses a method and apparatus for assisted GPS integrity maintenance. According to King et al, a cellular network protocol which maintaining the reliability of assisted GPS based positioning is taught (abstract). The apparatus, according to King et al, relates mobile stations. See abstract. Accordingly, King et al discloses an

Art Unit: 3661

apparatus for testing a performance of mobile station, such a cellular phone or PDA (104) having a global position system (GPS) function. See for example, column 1, lines 56-58, where it is described that the mobile station is equipped with a receiver suitable for use with a global satellite navigation system such as the Global positioning system (GPS). The mobile device includes a GPS receiver. Thus, the mobile station has global positioning system (GPS) function. The apparatus also includes a test block or integrity monitoring circuit (figure 13) including test commands and a user interface for testing the performance or integrity of the mobile station and of the GPS function. See columns 5 and 10. In particular, as shown in figure 10 and described in column 12, lines 48-63. According to King et al, installing separate GPS receivers for the purpose of GPS integrity monitoring in mobile stations (terminal) can be very expensive and time consuming. Therefore, the tests block and the test interface are included in the mobile station (terminal). According also to King et al, there is provided a conversion block (circuit) for converting a GPS radio frequency (RF) signal and a Code Division Multiple Access (CDMA) RF signal to baseband signals. See column 5, lines 50-55; column 11, lines 18-32. According further to King et al, the baseband signals so derived are used to generate status information. See column 11, lines 18-50.

The test interface, according to King et al, can be operated in different modes. See column 2, line61 to column 3, line 14. The test modes, according to King et al as described in column 3, lines 1-14, can a sensitivity mode, a Doppler mode, a time calibration or a setting mode. See also column 5, lines 1-9. As explained in column 6, the test user interface is included in a test mode menu list which a usual user does not have

Art Unit: 3661

access [to]. Columns 7 and 8, for example, describe providing a diagnostic monitoring (external) device if the mobile station is located in a shield box. References are also made to columns 11-14. The mobile station, according to King et al, comprises a memory (storage device) for loading software or program for the test block. See column 10, lines 27-49.

It should be noted that the patent of King et al could have been used to supplement the missing GPS function of the mobile unit of Ghisler et al [6,118,982] and Sasin et al [6,011,830]. Also, it should be noted that Chang discloses all the components and function of the test block. In addition, in addition to the different test modes described in the King et al, Chang could have used in combination with King et al for further emphasis on the test modes.

The amendments to the claims require new consideration. Therefore, this office action is made final.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 3661

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H. Louis-Jacques whose telephone number is 571-272-6962. The examiner can normally be reached on M-Th 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Jacques H Louis-Jacques Primary Examiner

Art Unit 3661